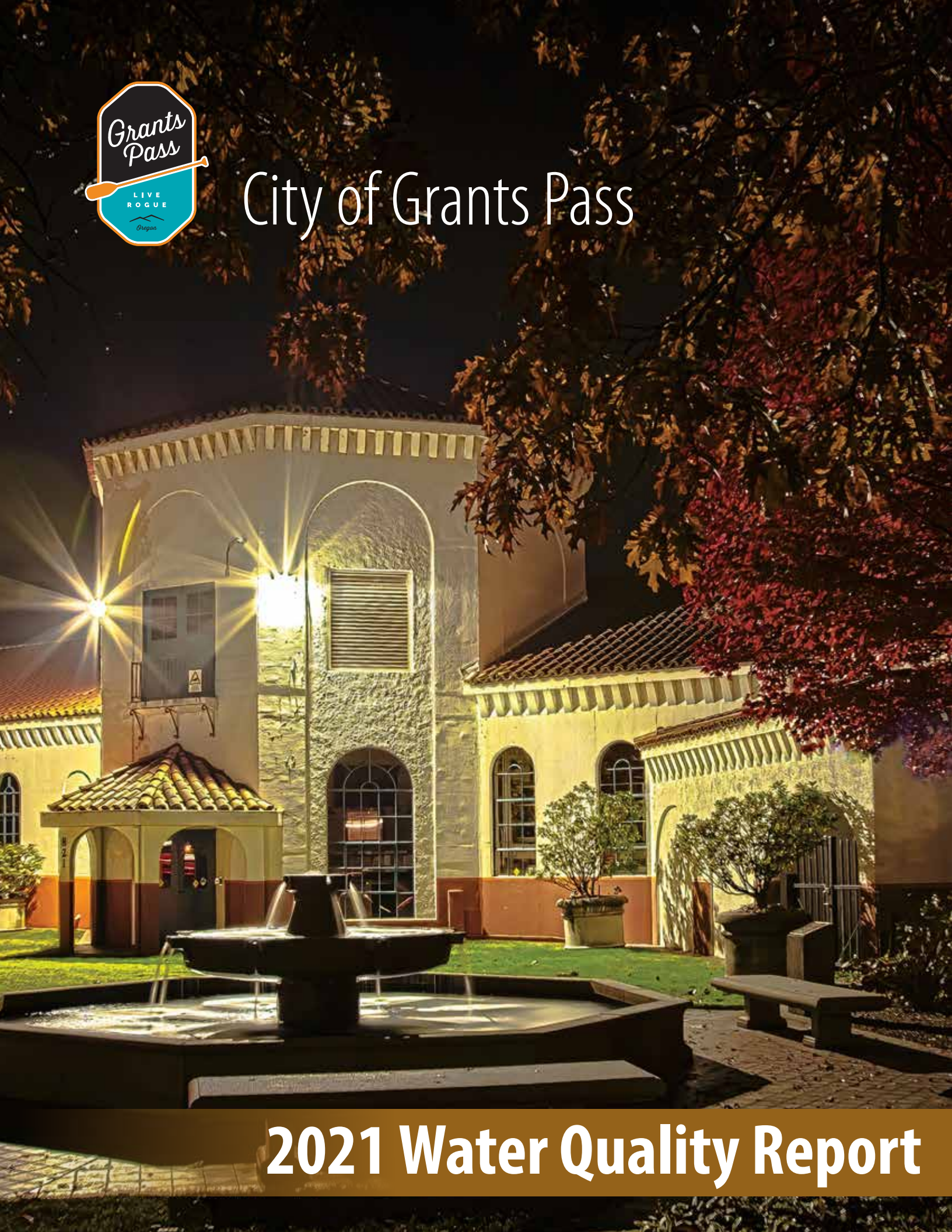


City of Grants Pass

2021 Water Quality Report

Dear Water Customer,

The City of Grants Pass is pleased to present you with our Water Quality Report for 2021. This report, required by the Environmental Protection Agency (EPA), provides you with detailed information about the quality of your drinking water, any detected contaminants, and compliance with drinking water rules. This report is also an opportunity for the City to provide you, the consumer, with educational information on where your water comes from, how it is treated, and what you can do to ensure that your water remains clean, fresh, and safe. If you would like any additional information regarding what is in your water or have suggestions on how we can better serve you, please contact Public Works at (541) 450-6110.

Sincerely,

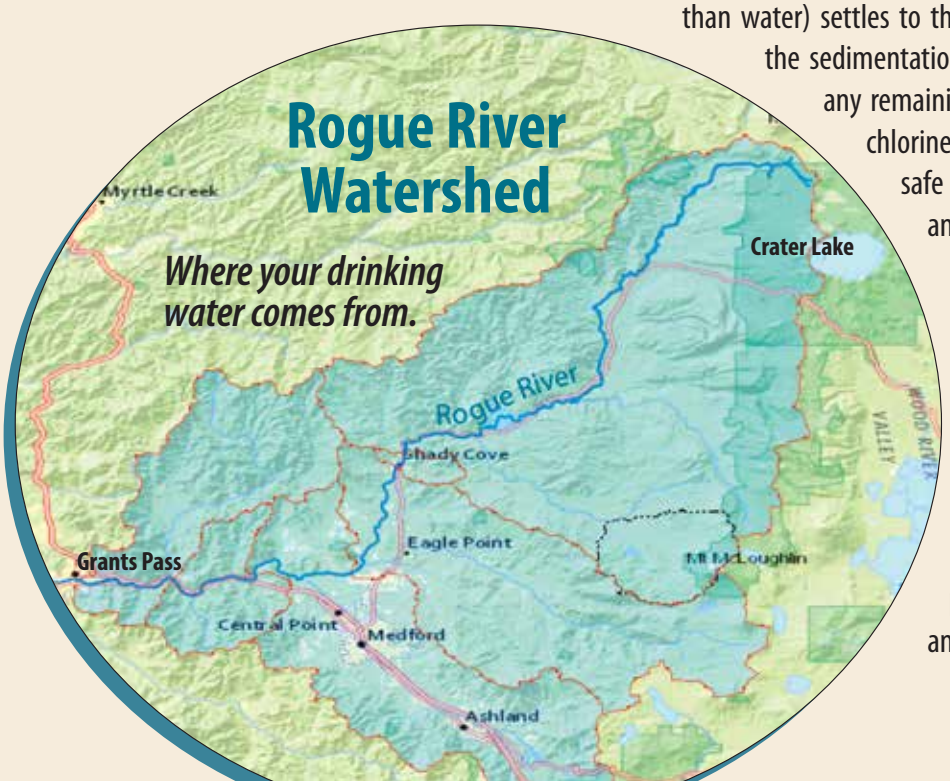
Jason M. Canady
Public Works Director

Source of Supply

The Rogue River has supplied the City of Grants Pass with its drinking water since 1888. From 1888 to 1930 water was pumped from the Rogue River and chlorinated to kill bacteria; however, it was not filtered. At certain times of the year, the drinking water was very cloudy. There was a need for filtration to make the water clear and pleasant tasting. During the period from the 1930s to 1983, the Water Treatment Plant expanded to its present capacity of 20 million gallons per day. Depending on the time of year and customer demand, the Water Treatment Plant presently produces between 1.88 to 13.38 million gallons per day. In 2021, the City distributed more than 2.28 billion gallons of water.

Water Treatment

Water drawn from the Rogue River is mixed with small amounts of chemicals which cause suspended materials in the water to clump together and form larger particles called "floc." The water enters sedimentation basins, where the floc (which is heavier than water) settles to the bottom of the tanks. The water then flows from the sedimentation basins into dual-media filters. The filters remove any remaining particles present in the water. In the final step, chlorine is added to the water for disinfection and to keep it safe in the distribution system as it travels to a reservoir and into your tap.



Water system operators are certified by the Oregon Health Authority Drinking Water Program (OHA-DWP) and are trained in all aspects of water treatment and distribution. They are required to complete continuing education classes in order to maintain their certification and to keep up to date on the latest standards and technology. We are pleased to report that the water we distribute is safe and meets all federal and state requirements.

Storage and Distribution

Treated water piped from the plant is pumped and stored by 13 remote pumping stations and 8 reservoirs ranging in size from 45,000 gallons to over 5,000,000 gallons. The distribution system is made up of five different elevation zones and more than 188 miles of distribution lines varying in size from 2 to 36 inches in diameter. Liquid chlorine is added at strategic points in the distribution system to maintain the chlorine residual mandated by the OHA-DWP.

Monitoring and Reporting Requirements

Grants Pass routinely monitors for contaminants in our water according to federal and state laws. The data within this report comes from the monitoring of our potable water supply for the period of January 1, 2021, to December 31, 2021. All water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

Federal and state regulations include procedures and schedules for monitoring water from the source to the tap. The OHA-DWP ensures that public water systems in Oregon comply with these regulations, follow monitoring schedules, and report monitoring results. The Grants Pass Water Treatment Plant and Distribution Department works hard to provide the highest quality water to every tap.

Cross Connection/Backflow Prevention

The City of Grants Pass has a long history of providing its customers with a continuous supply of safe drinking water. To help ensure the quality of the drinking water after it has left the treatment plant, the Oregon Health Authority requires the City of Grants Pass to maintain a Cross Connection Prevention Program. A cross-connection is an actual or potential connection between the City's potable water and another water source, contaminant, or pollutant. These connections can allow contaminants to flow backward from a water supply line when reduced or negative pressure occurs in the City's water supply lines. Potential sources of backflow hazards include in-ground irrigation systems, plumbing systems associated with pool equipment, solar panels, fire sprinkler systems, and auxiliary water supplies such as wells or connections to the Grants Pass Irrigation District. When a cross-connection risk is present, the owner must install and maintain the proper backflow assemblies as required. The City operates a single-family residential backflow testing and maintenance program, funded by a monthly $2.00 per backflow assembly fee on the utility bill. With this program the City maintains a contract to test and make minor repairs to all single family residential backflow assemblies. Assemblies must be tested every year but additional testing is required if an assembly is repaired, replaced, or relocated. If you have any questions regarding backflow or cross-connection, please contact the City of Grants Pass Water Distribution Division at (541) 450-6115.

Source Water Assessment

In 2018, the City, in partnership with the Oregon Department of Environmental Quality (OR-DEQ) completed an update to the City's Source Water Assessment. This assessment contains detailed information about potential threats to the City's source of supply: the Rogue River.

The Source Water Assessment provides water system operators with comprehensive maps and lists of potential sources of contamination. This helps water systems create plans to keep these potential contaminants out of the water supply.

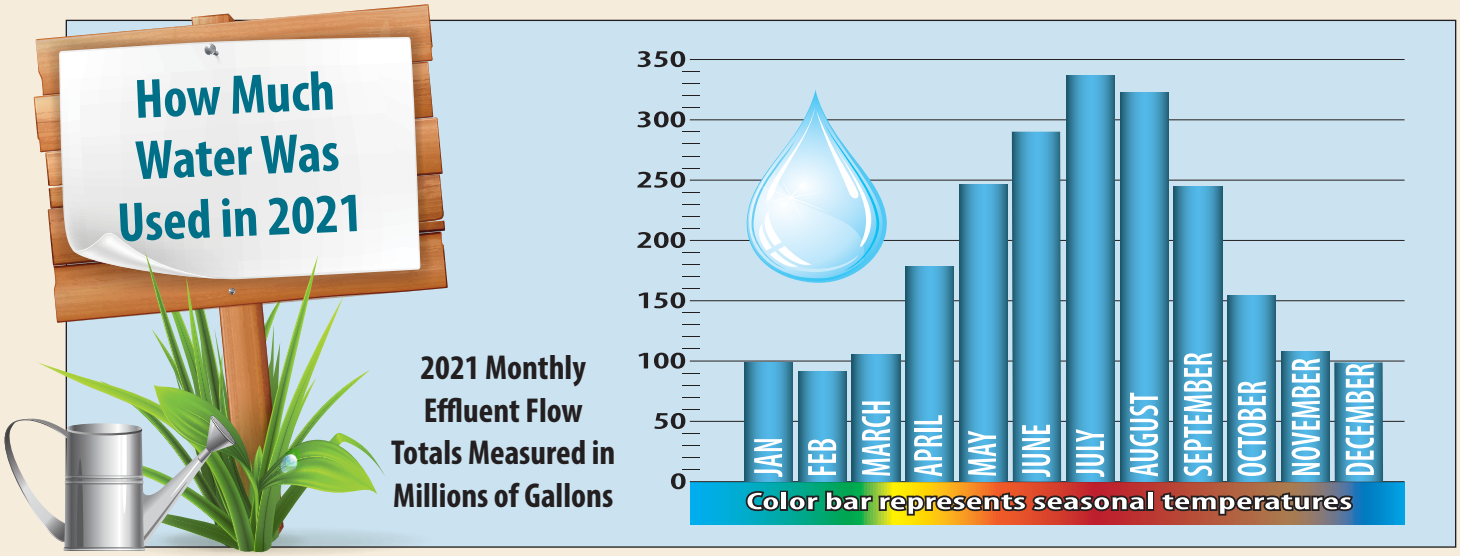
A copy of the Source Water Assessment report is available on our website at: www.grantspassoregon.gov/Water-Documents

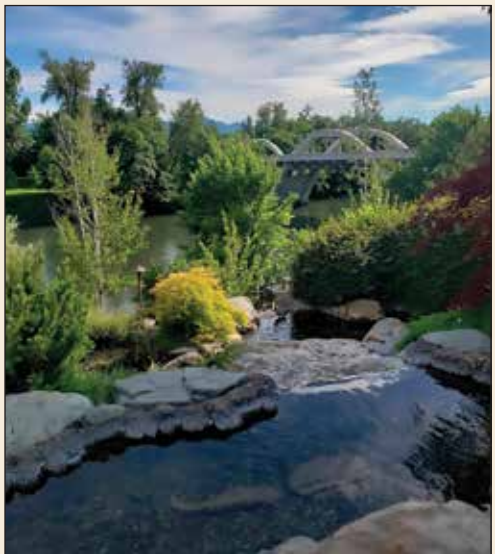
Results of Lead and Copper Analysis – Sept 2020

Variable	90th Percentile	Action Level* (AL)	Complies?	Typical Source
Copper	0.32 ppm	90% of the homes tested must have levels less than 1.3 ppm of Copper and 15 ppb of Lead	Yes No samples exceeded the Action Level	Corrosion of household plumbing; Erosion of natural deposits
Lead	0 ppb		Yes No samples exceeded the Action Level	

NOTES: Plumbing components may contribute to elevated lead and copper at the tap. There is no detectable lead in Grants Pass water supply sources. Copper occurs naturally at very low levels. Some homes and buildings may have elevated lead levels at the tap, if water stands in the pipes for several hours. Lead may leach from faucets or plumbing components. Leaching may also occur in copper pipes that are joined with lead-based solder. The lead and copper results reported here are from a targeted group of homes in Grants Pass retail and wholesale service area. This group of homes meets criteria for being at risk of having elevated levels of lead and copper at the tap.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Grants Pass Water Treatment Plant is responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by running your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.





2021 Photo Contest Winners

(left): 1st Place, Clarissa Stoney

(right): 2nd Place, Leo Tujak Titled "Wild and Free"

Grants Pass Water Future

Supplying clean water to our community for generations

On February 28, 2022, the Grants Pass City Council took a giant step forward towards the completion of a replacement water treatment plant and directed staff to begin the design of a plant that uses a membrane technology with powdered activated carbon (PAC).

The membrane technology offers many advantages to the City's water users. Membranes are considered a positive barrier. This means that nothing larger than 1 micron can pass through the system. This ensures a clean water supply even when river conditions are challenging. The addition of a PAC system will serve to adsorb potential taste, odors, or cyanotoxins released by harmful algal blooms, as well as potential future contaminants of emerging concern.

Another key feature of the membrane technology is its ability to provide unattended operations during peak season. Currently, the plant must hire six to seven additional operators during the summer season to cover 24-hour operations. The sophisticated membrane technology can operate unattended for extended periods of time, reducing the need for additional staffing while ensuring that the City has a plentiful supply of clean, safe drinking water.

Plant design activities will continue through fall of 2023, when construction will begin. In the meantime, preliminary activities will continue such as geotechnical drilling will occur as consultants are looking to assess the water table and ground stability for the future plant.

The City invites all of its water users to follow the project at the following website www.grantspasswater.org. This website will be updated frequently with current project schedules, photos, and videos of this historic public works project. Viewers can also sign up to receive project updates through email by subscribing at the following link https://www.grantspassoregon.gov/list.aspx.

Estimated construction for the Water Treatment Plant is scheduled to begin early 2023.

Join Us

You are encouraged to participate in City decisions that may affect water quality.
City Council meetings are held at City Hall, 101 NW A Street, Grants Pass, the first and third Wednesday of each month starting at 6:00 pm.
To watch online, visit https://www.grantspassoregon.gov/342/Livestreamed-Meetings-Broadcasts-and-Vid

Results of Turbidity and Microbiological Analysis of Treated Water After Disinfection

(All results meet State and Federal drinking water regulations)

Variable	Maximum Amount Found	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Typical Source	Meets Regulations
Physical Testing Characteristic Turbidity	0.15 NTU 0.02 NTU Yearly Daily Average	A violation exists if > 5% of samples are > 0.30 NTU	n/a	Soil erosion and stream sediment	Yes
Microbiological Testing Total Coliform Bacteria	Zero positive tests	5% or more samples test positive	Zero positive tests	Soil bacteria and animal feces	Yes
Disinfection Residual	1.38 ppm Range 1.14 ppm - 1.38 ppm	MRDL = 4.0 ppm	MRDLG = 4.0 ppm	Chlorine is used as a disinfectant in the water treatment process	Yes

NOTES:

Turbidity and NTUs.
Turbidity is regulated because it can provide a medium for bacterial growth. Turbidity is measured in nephelometric turbidity units (NTUs). The Water Treatment Plant consistently delivers water that is well under federal and state standards.

Total Coliform Bacteria.
Testing for these bacteria after disinfection helps confirm the effectiveness of the disinfection process. (Bacteria may have been present in the source water.) Total coliform bacteria are also indicators of possible contamination that might occur after treatment.

Chlorine Residual. Federal and State drinking water regulations require detectable disinfectant residual (chlorine) throughout our water distribution system. Water entering the Grants Pass distribution system has approximately 1.2 parts per million of chlorine.

Rogue River Turbidity (2021 Averages)

Summer Daily Average	2.2	NTUs
Winter Daily Average	7.7	NTUs
Maximum Daily Average	46	NTUs

Production Data (2021 Averages - million gallons per day)

Summer Daily Average	10.3	MGD
Winter Daily Average	3.2	MGD
Maximum Daily Flow	13.4	MGD

Increased Water Monitoring

In 2018, the City of Grants Pass, Medford Water Commission, City of Rogue River, City of Gold Hill, Rogue River Watershed Council, and others formed the Rogue Basin Drinking Water Providers. This partnership, utilizing grant funds from the State of Oregon, is working to enhance source water protection in the Rogue Basin. Issues that adversely impact the Rogue River affect all residents of the Rogue Valley, especially those who rely on the Rogue River for their drinking water. The partnership is working to create educational materials and media releases, to raise awareness of the importance of Source Water Protection to our communities.

ROGUE DRINKING WATER PARTNERSHIP
Know Your Source
Protect Your Source

In response to the Almeda and South Obenchain fires, the City and the Partnership has increased its water quality monitoring. We are pleased to report that no contaminants have been found at or above reportable levels in the city's drinking water. The City and Partnership members working through a grant from the Oregon Health Authority are installing online instrumentation that will monitor the Rogue River and several of its key tributaries in real-time for key parameters that may affect raw water quality. This data will be available to partnership members to assist in responding to potential threats to the water quality that we all rely on.

Results of Disinfection By-Product Analysis

(All results meet state and federal drinking water regulations)

Substance	Location	Average Result (ppb)	Range of Results (ppb)	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Source of Contaminant	Complies
Total Trihalomethanes (TTHMs)	New Hope Pump Station	25.9	17.6 – 39.5	Running Annual Average <80 ppb	Zero ppb	By-products of chlorination used in the water treatment process	Yes
	Forest View Drive	31.5	26.1 – 37.1				
	Starlite Drive	51.4	46.1 – 58.0				
	Merlin Landfill	49.0	44.8 – 52.9				
Haloacetic Acids (HAA5s)	New Hope Pump Station	16.6	9.6 – 22.3	Running Annual Average <60 ppb	Zero ppb	By-products of chlorination used in the water treatment process	Yes
	Forest View Drive	28.6	17.4 – 35.6				
	Starlite Drive	31.7	22.3 – 42.3				
	Merlin Landfill	35.2	23.5 – 43.5				

NOTES: During disinfection, certain by-products form as a chemical reaction between chlorine and naturally occurring organic matter in the water. The disinfection process is carefully controlled so that the disinfection is maintained while keeping the levels of disinfection by-products below regulatory limits.

Some people who drink water containing TTHMs in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Disinfection by-products are monitored quarterly. The results of one quarter are averaged with results of three previous quarters and reported as a running annual average (RAA). One of the Haloacetic Acids (HAA5s) results exceeded the 60 ppb MCL but because the Location Running Annual Average was below the MCL a violation did not occur.

Acronyms and Key Definitions

AL - ***Action Levels.*** The concentration of a contaminant that if exceeded, triggers treatment or other requirements that a water system must follow.

Contaminant - ***Any substance found in water***. Not all contaminants are harmful.

MCL - ***Maximum Contaminant Level.*** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG - ***Maximum Contaminant Level Goal.*** The level of a contaminant in drinking water below that there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL - ***Maximum Residual Disinfectant Level.*** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG - ***Maximum Residual Disinfectant Level Goal.*** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

ND@ - ***Not Detected.*** At a particular detection point because laboratory instruments are only able to detect chemicals to certain minimum levels.

NTU - ***Nephelometric Turbidity Unit***. Unit of measure used to describe water clarity. The smaller the number the clearer the water.

ppb - ***Parts per Billion***. A part per billion indicates the amount of a substance in a billion parts of water; this compares with one penny in $10 million.

Potable - ***Safe to Drink***. Drinkable.

ppm - ***Parts per Million***. A part per million means that one part of a particular substance is present for every million parts of water; this compares to one penny in $10,000. Similarly, it is the same as 1 mg/l (milligram per liter).

TT – ***Treatment Technique***. A required process intended to reduce the level of a contaminant in drinking water.

Turbidity - ***Turbidity.*** A measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

Frequently Asked Questions

Does the City add fluoride to the water?

No, we do not add fluoride to the water. However, there are low levels of naturally occurring fluoride in the drinking water. The level is neither beneficial for cavity fighting nor does it present a health hazard.

Why does the taste and odor of my water sometimes differ?

Water naturally varies in taste and odor at different times of the year. Taste and odor problems in your drinking water can come from new or old pipelines, plumbing fixtures, or changes in raw water quality.

Is Grants Pass city water soft or hard ?

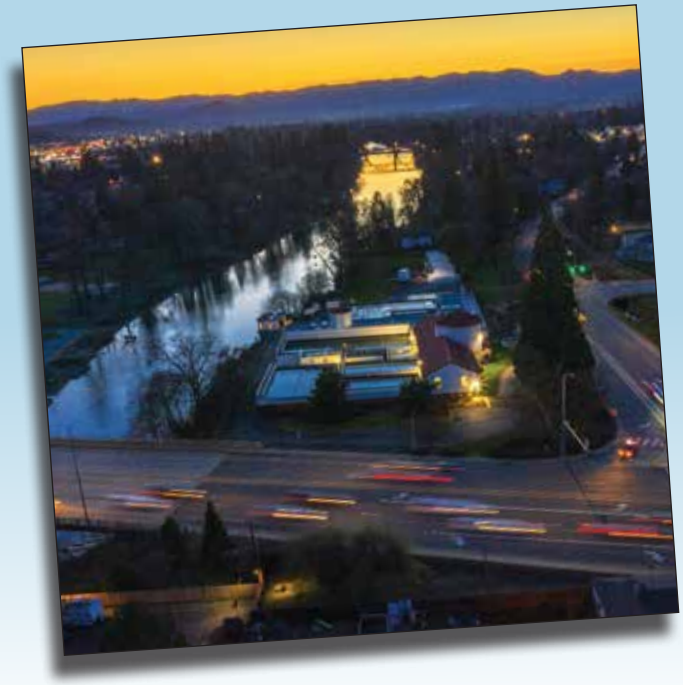
Grants Pass city water is soft to moderately soft. It ranges from 1.90 to 3.4 grains of hardness per gallon (less than 59 parts per million CaCO3).

What is the pH of the City's water ?

Grants Pass city water after treatment averages 7.2 pH units.

Water Report Photo Contest

Get out there and have some fun!



The City of Grants Pass invites
Josephine County residents to enter our

2022
"Water in the Community" Photo Contest

For this year's theme, "Water in the Community," we are looking for various ways to use water in the City of Grants Pass or in Josephine County. All levels of photographers are encouraged.

The entry deadline is 5 pm on Friday, December 16, 2022. Photos will be judged on the theme for the Grand Prize, and will be included in our report for the "2022 Consumer Confidence Report."

- **First place contest winner will receive $150**
- **Second place winner will receive $75**

How to enter:

Photos must be submitted in digital format suitable for reproduction. All photos are subject to creative cropping and manipulation needed for the formatting of our report or any additional printed or digital materials used. Submitted photos may be used for additional materials without any restrictions. You may request entry forms to be mailed by calling (541) 450-6110. Details of photo contest rules and entry forms will be available online at: **www.grantspassoregon.gov**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections.

These people should seek advice from their health care providers about drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

More information about contaminants and potential health effects can be obtained by calling the following numbers:

Environmental Protection Agency	Oregon Health Authority	Josephine County	City of Grants Pass
Safe Drinking Water Hotline:	Drinking Water Program:	Public Health:	Public Works Office:
(800) 426-4791	**(971) 673-0405**	**(541) 474-5325**	**(541) 450-6110**

Past reports can be viewed at: www.grantspassoregon.gov/CCR

City of Grants Pass, Public Works Department • 101 NW A Street • Grants Pass, OR 97526 • (541) 450-6110

Report designed by Ben Blankenbaker, Flying Toad Graphics. Cover photo courtesy of David Wheaton.